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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,556	02/23/2004	Xiaoshu Xu	MAE-OC1	8670

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EXAMINER	
MAFI, EHSAN D	

ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
08/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/784,556	XU, XIAOSHU	
	Examiner	Art Unit	
	Ehsan D. Mafi	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/23/20004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 24 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 14 of copending Application No. 10/877018. Although the conflicting claims are not identical, they are not patentably distinct from each other because the current application is broader with less detailed claim language than the copending application. Side-by-side comparisons of the claims in question are outlined in the table below.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Application No. 10/877018. The conflicting claims are not identical because patent claim 1 of the copending application requires the additional step of "neural net having both inter and intra layer connections of all nodes" and "connected in a wired or wireless fashion", not required by claim 1 of the current application. However, the conflicting claims are not patentably distinct from each other because:

- Claims 1 and copending claim 1 recite common subject matter;
- Whereby claim 1, which recites the open ended transitional phrase "comprising", does not preclude the additional elements recited by copending claim 1, and
- Whereby the elements of claim 1 are fully anticipated by copending claim 1, and anticipation is "the ultimate or epitome of obviousness" (*In re Kalm*, 154 USPQ 10 (CCPA 1967), also *In re Dailey*, 178 USPQ 293 (CCPA 1973) and *In re Pearson*, 181 USPQ 641 (CCPA 1974)).

4. Claim 24 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Application No. 10/877018. The conflicting claims are not identical because patent claim 14 requires the additional step of "neural net having both inter and intra layer connections of all nodes", not required by claim 24. However, the conflicting claims are not patentably distinct from each other because:

- Claims 24 and copending claim 14 recite common subject matter;
- Whereby claim 24, which recites the open ended transitional phrase "comprising", does not preclude the additional elements recited by copending claim 14, and
- Whereby the elements of claim 24 are fully anticipated by copending claim 14, and anticipation is "the ultimate or epitome of obviousness" (*In re Kalm*, 154 USPQ 10 (CCPA 1967), also *In re Dailey*, 178 USPQ 293 (CCPA 1973) and *In re Pearson*, 181 USPQ 641 (CCPA 1974)).

Current Application	Copending Application 10/877018
1. A system for personal identity verification comprising:	1. A system for personal identity verification comprising:
a computer based enrollment system for training a neural net to obtain neural net weights for a biometric of a user;	a computer based enrollment system for training a neural net to obtain neural net weights for a biometric of a user, (***detail:*** said neural net having both inter and intra layer connections of all nodes);
a carrier;	an electronic device containing a microprocessor with internal memory (***i.e. a carrier***);
a validation biometric sensor for capturing a biometric reading from said user, mounted on said carrier and connected to said neural net engine circuitry; and	a validation biometric sensor for capturing a biometric reading from said user, connected (***detail:*** in a wired or wireless fashion) to said electronic device; and
neural net engine circuitry mounted on said carrier and having memory for stored neural net weights obtained from said computer based enrollment system for said user.	neural net engine (simulation software code ported into said internal memory of said electronic device ***a.k.a carrier***) along with said neural net weights (***detail:*** for a biometric of a user) from said computer based enrollment system.

24. A method for personal identity verification comprising the steps of:	14. A method for personal identity verification comprising the steps of:
sensing enrollment information related to a biometric of a user that is recorded by an enrollment sensor;	sensing enrollment information related to a biometric of a user that is recorded by an enrollment sensor;
transferring said enrollment information to a computer;	transferring said enrollment information to a computer;
combining said enrollment information with samples from a representative database of biometrics from other individuals to form a training set;	combining said enrollment information with samples from a representative database of biometrics from other individuals to form a training set;
using said training set and a computer algorithm in said computer to train a pre-chosen neural net structure to preferentially select said biometric of a user and in so doing calculating a chosen set of neural net weights;	using said training set and a computer algorithm in said computer to train a pre-chosen neural net structure to preferentially select said biometric of a user and in so doing calculating a chosen set of neural net weights, (***detail:*** wherein said neural net is composed of both inter and intra layer connections);
transferring said chosen set of neural net weights into neural net circuitry attached to a carrier;	transferring neural net engine (simulation software code into said internal memory of an electronic device ***a.k.a carrier***) along with said neural net weights (***detail:*** for a biometric of a user from said computer based enrollment system).
sensing validation information relative to a biometric of a user that is recorded by a biometric validation sensor attached to said carrier;	sensing validation information relative to a biometric of a user that is recorded by a biometric validation sensor in communication with said electronic device;
transferring said validation information to said neural net circuitry to generate a verification value at the output node; and	transferring said validation information to said neural net engine simulation software code to calculate a verification value for the output node; and
producing an acceptance signal when the value generated by said output node is within a pre-determined acceptance range.	producing an acceptance signal when the value generated by said output node is within a pre-determined acceptance range.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ehsan D. Mafi whose telephone number is (571) 272-9612. The examiner can normally be reached on Monday-Friday 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDM